## Amendments to the Specification:

Please replace paragraph [0064] with the following rewritten paragraph:

[0064] Also, at Step S9, the controller 31 functions as a carrier-wave-transmission stopping portion which periodically (i.e., at a pre-set second period longer than the first period) stops the interrogator 10 from transmitting the common carrier wave. More specifically described, if the pre-set second period has passed since the switch 42a is turned on at Step S8, the control of the controller 31 goes to Step S7. In many cases, a negative judgment is and a positive judgment are made at each of Steps S7 and S1, respectively. Thus, the control goes to Step S2 to turn off the switch 42a to stop the transmission of the common carrier wave. Subsequently, the carrier-wave-transmission stopping portion periodically stops the interrogator 10 from transmitting the common carrier wave.